Decatur County Stormwater Management Ordinance

1st Draft (February 2023)

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General Information

(a) AUTHORITY AND TITLE

This Ordinance, which generally follows the Indiana LTAP Model Stormwater Management Ordinance document, is adopted in accordance with statutory authority granted to Decatur County under "Home Rule". Based on this authority and these requirements, this Ordinance regulates:

- i. Stormwater drainage improvements related to development of lands located within the corporate boundaries of Decatur County.
- ii. Drainage control systems installed during new construction and grading of lots and other parcels of land.
- iii. Stormwater, including stormwater runoff, snowmelt runoff, and surface runoff and drainage, associated with construction activity.
- iv. grading of lots and other parcels of land.
- v. The design, construction, and maintenance of stormwater drainage facilities and systems.
- vi. The design, construction, and maintenance of new dams
- vii. The development downstream of existing dams
- viii. Development within floodplains, floodways, fluvial erosion hazard corridors, and bluff zones

This Ordinance shall be known and may be cited as the Decatur County Stormwater Management Ordinance. Once adopted, this Ordinance will supersede any conflicting ordinances previously adopted by Decatur County.

(b) APPLICABILITY AND EXEMPTIONS

This Ordinance shall regulate all development and redevelopment occurring within Decatur County. No building permit shall be issued and no land disturbance started for any construction in a development, as defined in Appendix A, until the plans required by this Ordinance for such construction have been accepted in writing by Decatur County. Single-family dwelling houses and duplexes in accepted subdivisions, and land-disturbing activities affecting less than 10,000 square feet of area shall be exempt from the requirements of this Ordinance. Also exempt from this Ordinance shall be agricultural land-disturbing activities.

In addition to the requirements of this Ordinance and its companion Stormwater Technical Standards Manual, compliance with all applicable ordinances of Decatur County as well as with applicable Federal, State of Indiana, and other Local statues and regulations shall also be required. Unless otherwise stated, all other specifications referred to in this Ordinance shall be the most recent edition available. Decatur County capital improvement projects shall be exempt from obtaining a permit, but are expected to meet all applicable technical requirements of this Ordinance and the Decatur County Stormwater Technical Standards Manual. In case there are conflicts between the requirements contained in this Ordinance and applicable requirements contained in other regulatory documents referenced above, the most restrictive shall prevail.

Any construction project which has had its final drainage plan accepted by Decatur County within a 2-year period prior to the effective date of this Ordinance shall be exempt from all requirements of this Ordinance that are in excess of the requirements of ordinances in effect at the time of acceptance. Such an exemption is not applicable to the requirements detailed in Section 2 of this Ordinance.

Decatur County has the authority to modify, grant exemptions, and/or waive any and all the requirements of this Ordinance and its associated technical standards document. A pre-submittal meeting with Decatur County may be requested by the applicant to discuss the applicability of various provisions of the Ordinance and its

associated technical standards document with regards to unique or unusual circumstances relating to a project. However, any initial determination of such applicability shall not be binding on future determinations of Decatur County that may be based on the review of more detailed information and plans.

(c) FINDINGS

Decatur County finds that:

- 1. Water bodies, roadways, structures, and other property within Decatur County or its planning jurisdiction boundary are at times subjected to flooding;
- 2. Flooding is a danger to the lives and property of the public and is also a danger to the natural resources of the region;
- 3. Land development alters the hydrologic response of watersheds, resulting in increased stormwater runoff rates and volumes, increased flooding, increased stream channel erosion, and increased sediment transport and deposition;
- 4. Increased stormwater runoff rates and volumes, and the sediments and pollutants associated with stormwater runoff from future development projects within Decatur County will, absent reasonable regulation and control, adversely affect Decatur County's water bodies and water resources;
- 5. Adopting the standards, criteria, and procedures contained and referenced in this Ordinance and implementing the same will address many of the deleterious effects of new development and re-development on flooding, drainage, and channel erosion;
- 6. Adopting this Ordinance is necessary for the preservation of the public health, safety, and welfare, for the conservation of natural resources, and for compliance with State and Federal regulations.

(d) PURPOSE

The purpose of this Ordinance is to provide for the health, safety, and general welfare of the citizens of Decatur County through the regulation of stormwater discharges to the storm drainage system and to protect, conserve and promote the orderly development of land and water resources within Decatur County. This Ordinance establishes methods for managing the quantity of stormwater entering into the storm drain system. The objectives of this Ordinance are:

- i. To reduce the hazard to public health and safety caused by excessive stormwater runoff.
- ii. To establish legal authority to carry out all inspection, monitoring, and enforcement procedures necessary to ensure compliance with this ordinance.

(e) ABBREVIATIONS AND DEFINITIONS

For the purpose of this Ordinance, the abbreviations and definitions provided in Appendix A shall apply.

(f) RESPONSIBILITY FOR ADMINISTRATION

The Decatur County Area Plan Commission through its Area Plan Director shall administer, implement, and enforce the provisions of this Ordinance. Any powers granted or duties imposed upon the authorized enforcement agency may be delegated in writing by the Decatur County Area Plan Director to qualified persons or entities acting in the beneficial interest of or in the employ of Decatur County.

(g) INTERPRETATION

Words and phrases in this Ordinance shall be construed according to their common and accepted meanings, except that words and phrases defined in Appendix A, shall be construed according to the respective definitions given in that section. Technical words and technical phrases that are not defined in this Ordinance, but which have acquired particular meanings in law or in technical usage shall be construed according to such meanings.

(h) **SEVERABILITY**

The provisions of this Ordinance are hereby declared severable, and if any court of competent jurisdiction should declare any part or provision of this Ordinance invalid or unenforceable, such invalidity or unenforceability shall not affect any other part or provision of this Ordinance.

(i) DISCLAIMER OF LIABILITY

The degree of protection required by this Ordinance is considered reasonable for regulatory purposes and is based on historical records, engineering, and scientific methods of study. Larger storms may occur or stormwater runoff amounts may be increased by man-made or natural causes. This Ordinance does not imply that land uses permitted will be free from stormwater damage. This Ordinance shall not create liability on the part of Decatur County or any officer, representative, or employee thereof, for any damage that may result from reliance on this Ordinance or on any administrative decision lawfully made there under.

The words "approve" and "accept", and their common derivations as used in this Ordinance in relation to plans, reports, calculations, and permits shall mean that Decatur County has reviewed the material produced and submitted by the applicant or his/her agents for general compliance with this Ordinance and the Decatur County Stormwater Technical Standards Manual, and that such compliance would qualify the applicant to receive a stormwater management approval or permit. Such an "approval" or "acceptance" is based on the assumption that the project engineer has followed all appropriate engineering methods in the design. Any stormwater quantity (drainage) or water quality problems associated with the project caused by poor construction by the contractor and/or poor engineering design or judgment, either on-site or off-site, are the responsibility of the developer and the project engineer.

Consideration, design, construction, and maintenance of safety measures for proposed or existing stormwater facilities shall be the responsibility of the developer, applicant, and/or the property owner. Decatur County and its officials and representatives shall not be responsible for maintenance nor liability for any accidents.

SECTION 2

Prohibited Discharges and Connections

Decatur County is not currently designated as an MS-4 entity by IDEM, consequently, the Indiana Department of Environmental Management (IDEM), through the Construction Stormwater General Permit (CSGP), directly regulates all discharges, including illegal dumping, entering any storm drain system, regardless of whether the discharge originates from developed or undeveloped lands, and regardless of whether the discharge is generated from an active construction site or a stabilized site. These discharges include flows from direct connections to the storm drain system, illegal dumping, and contaminated runoff.

Contact IDEM directly for details regarding the regulations associated with prohibited discharges and exempted discharges.

SECTION 3

Stormwater Quantity Management

(a) APPLICABILITY AND EXEMPTIONS

The storage and controlled release of excess stormwater runoff shall be required for all new business, institutional developments, commercial and industrial developments, residential subdivisions, planned development, rural estate subdivisions, and any redevelopment or other new construction located within Decatur County. Decatur County, after thorough investigation and evaluation, may waive the requirement of controlled runoff for minor subdivisions and parcelization. Additional potential exemptions regarding the detention requirements are provided under Sub-section (b).

(b) POLICY ON STORMWATER QUANTITY MANAGEMENT

It is recognized that most streams and drainage channels serving Decatur County do not have sufficient capacity to receive and convey stormwater runoff resulting from continued urbanization. Accordingly, the storage and controlled release of excess stormwater runoff as well as compensation for loss of floodplain storage shall be required for all developments and redevelopments (as defined in Appendix A) located within Decatur County. Release rate requirements, downstream restriction considerations, acceptable outlet, adjoining property impact considerations, policy on dams and levees, policy on Fluvial Erosion Hazard corridors, and compensatory floodplain storage rates are detailed in the Decatur County Stormwater Technical Standards.

Due to unknowns regarding the future development patterns and the associated proposed stormwater quantity management systems within a watershed, it is the policy of Decatur County to discourage direct release of runoff from a new development or redevelopment without providing detention. However, in rare circumstances, where a comprehensive watershed-wide hydrologic study or watershed plan of a major stream (not a "beat the peak" analysis) adopted by Decatur County substantiates the benefits of (or allows for) direct release for a proposed development located adjacent to a major stream, the detention requirements set in this Ordinance may be waived. Other special circumstances when such a waiver may be considered by Decatur County include situations where the design of a regional pond has already taken into account the provision of direct release in certain areas in the watershed.

(c) CALCULATIONS AND DESIGN STANDARDS AND SPECIFICATIONS

The calculation methods as well as the type, sizing, and placement of all stormwater facilities shall meet the design criteria, standards, and specifications outlined in the Decatur County Stormwater Technical Standards Manual. The methods and procedures in the Stormwater Technical Standards Manual are consistent with the policy stated above.

(d) DRAINAGE EASEMENT REQUIREMENTS

All stormwater systems, including detention or retention basins, conveyance systems, structures and appurtenances, located outside of the right-of-way shall be placed within a drainage easement. There shall be no trees or shrubs planted, nor any structures or fences erected in any drainage easement, unless otherwise accepted by Decatur County. Additional easement requirements along stormwater conveyance systems are contained in the Decatur County Stormwater Technical Standards Manual. All drainage improvements

performed relative to the conveyance of stormwater runoff and the perpetual maintenance thereof, within the latter easements, shall be the responsibility of the owner or homeowner association or the property owner.

(e) PLACEMENT OF UTILITIES

No utility company may disturb existing storm drainage facilities without the consent of Decatur County Plan Director, whose decision may be appealed to Decatur County Plan Commission. All existing drainage facilities shall have senior rights and damage to said facilities shall result in penalties as prescribed in Section 7 of this ordinance.

(f) INSPECTION, MAINTENANCE, RECORD KEEPING, AND REPORTING

After the approval of the Stormwater Management Permit by Decatur County and the commencement of construction activities, Decatur County has the authority to conduct inspections of the work being done to ensure full compliance with the provisions of this section, the Stormwater Technical Standards Manual, Design and Construction Standards (if applicable), and the terms and conditions of the approved permit.

Decatur County also has the authority to perform long-term, post-construction inspection of all public or privately owned stormwater quantity facilities. The inspection will cover physical conditions, available storage capacity, and the operational condition of key facility elements. Stormwater quantity facilities shall be maintained in good condition, in accordance with the designed and approved performance specifications for the facilities, in addition to any prescribed Operation & Maintenance procedures, and shall not be subsequently altered, revised, or replaced except as approved by Decatur County. If deficiencies are found during the inspection, the owner of the facility will be notified by Decatur County and will be required to take all necessary measures to correct such deficiencies. If the owner fails to correct the deficiencies within the allowed time period, as specified in the notification letter, Decatur County will undertake the work and collect from the owner using lien rights if necessary.

Assignment of responsibility for maintaining facilities serving more than one lot or holding shall be documented by appropriate covenants to property deeds, unless responsibility is formally accepted by a public body, and determined before the final stormwater permit is approved.

Stormwater conveyance facilities may be donated to Decatur County or other unit of government designated by Decatur County, for ownership and permanent maintenance provided that Decatur County or other governmental unit is willing to accept responsibility.

SECTION 4

Erosion and Sediment Control

As part of the CSGP, IDEM requires that a Stormwater Pollution Prevention Plan (SWPPP) is submitted to IDEM (or the County SWCD, if so designated by IDEM) for sites equal or larger than 1 acre and for smaller lots that are part of a larger subdivision, which includes erosion and sediment control measures and materials handling procedures (for treatment of pollutants both during construction or post-construction). The Engineer/Developer should contact IDEM (or the County SWCD, if so designated by IDEM) directly to apply for the necessary SWPPP approvals.

SECTION 5

Post-construction Channel Protection

(a) APPLICABILITY AND EXEMPTIONS

While the requirements in Section 3 of this Ordinance addresses the peak runoff rates, they do not address the additional runoff volume and duration that is typically associated with new development and re-development. To prevent the negative impacts of increased runoff volume and duration on streambank stability downstream of a development site, the development plans must also include post-construction channel protection measures. These measures are incorporated as a permanent feature into the site plan and are left in place following completion of construction activities to continuously address runoff from the stabilized site. Any project located within the corporate boundaries of Decatur County with a development site area equal or exceeding 10 acres is subject to the requirements of this section.

It will be the responsibility of the project site owner to complete a stormwater permit application and ensure that a sufficient construction plan is completed and submitted to Decatur County in accordance with Section 6 of this Ordinance. It will be the responsibility of the project site owner to ensure proper construction and installation of all stormwater BMP's (especially, the protection of post-stormwater Channel Protection BMPs during construction phase) in compliance with this Ordinance, IDEM requirements, and with the approved Stormwater Management Permit.

(b) POLICY ON STORMWATER QUALITY MANAGEMENT

It is recognized that stream channels develop their shape in response to the volume and rate of runoff that they receive from their contributing watersheds. Research has shown that in hydrologically stable watersheds, the stream flow responsible for most of the shaping of the channel (called the bankfull flow) occurs between every one to two years. When land is developed, the volume and rate of runoff from that land increases for these comparatively small flooding events that are not normally addressed by the detention practices and the stream channel will adapt by changing its shape. As the stream channel works to reach a new stable shape, excess erosion occurs. As new development and re-development continues within the corporate boundaries of Decatur County, measures must be taken to minimize the impact of such development or re-development on streambank erosion. Through the use of appropriate Best Management Practices (BMPs) to retain and/or detain and slowly release the Channel Protection Volume (CPv), the volume and rate of runoff for channel forming flows will be reduced in an attempt to minimize increased streambank erosion in the receiving streams and channels.

The project site owner must submit to Decatur County development plans that shows placement of appropriate Channel Protection BMP(s) from a pre-approved list of BMP's specified in the Decatur County Stormwater Technical Standards Manual. The submittal shall include an Operation and Maintenance Manual for all post-construction BMP(s) included in the project and a notarized Maintenance Agreement, consistent with the sample agreement provided in the Decatur County Stormwater Technical Standards Manual, providing for the long-term maintenance of those BMPs, both of which shall be recorded with the deed for the property on which the project is located. The noted BMP(s) must be designed, constructed, and maintained according to guidelines provided or referenced in the Decatur County Stormwater Technical Standards Manual.

(c) CALCULATIONS AND DESIGN STANDARDS AND SPECIFICATIONS

The calculation methods as well as the type, sizing, and placement of channel protection measures, or BMPs shall meet the design criteria, standards, and specifications outlined in the Decatur County Stormwater Technical Standards Manual.

(d) EASEMENT REQUIREMENTS

For the purposes of monitoring, inspection, and general maintenance activities, a minimum of 20-foot wide easement beyond the actual footprint of the channel protection BMP as well as a 20-foot wide access easement from a public right-of-way to each BMP shall be provided.

(e) INSPECTION, MAINTENANCE, RECORD KEEPING, AND REPORTING

After the approval of the Stormwater Management Permit by Decatur County and the commencement of construction activities, Decatur County has the authority to conduct inspections of the work being done to ensure full compliance with the provisions of this section, the Decatur County Stormwater Technical Standards Manual, and the terms and conditions of the approved permit.

Channel protection facilities shall be maintained in good condition, in accordance with the Operation and Maintenance procedures and schedules listed in the Decatur County Stormwater Technical Standards Manual, in addition to the designed and approved performance specifications for the facilities and shall not be subsequently altered, revised, or replaced except as approved by Decatur County.

Details regarding the required channel protection BMP Maintenance Agreement and the O&M Maintenance Manual, and their transfer to other parties or subsequent owners prior to release of the maintenance bond discussed in Section 6 of this Ordinance is provided in the Decatur County Stormwater Technical Standards Manual.

Decatur County also has the authority to perform long-term, post-construction inspection of all public or privately owned channel protection facilities. The inspection will cover physical conditions, available channel protection storage capacity and the operational condition of key facility elements. Noted deficiencies and recommended corrective action will be included in an inspection report.

SECTION 6

Permit Requirements and Procedures

(a) CONCEPTUAL DRAINAGE PLAN REVIEW

In order to gain an understanding of the drainage requirements for a specific project, a developer may submit conceptual drainage plans and calculations for review by Decatur County. The direction provided by Decatur County during such a review is based on preliminary data and shall not be construed as an acceptance or binding on either party. The following is a general listing of minimum data requirements for the review of conceptual drainage plans:

- i. Two (2) complete sets of conceptual plans showing general project layout, including existing and proposed drainage systems (plan sheets must be larger than 11" by 17", but not to exceed 24" by 36").
- ii. General description of the existing and proposed drainage systems in narrative form.
- iii. Map showing on-site 100-year floodplain and floodway (please note if none exists).
- iv. Map showing all wetlands, lakes, and ponds on or adjacent to the site.
- v. Watershed Boundaries with USGS Contours or best information possible.
- vi. Two (2) copies of drainage calculations detailing existing and proposed discharges from the site.
- vii. Existing watercourse or regulated drains.

(b) PERMIT PROCEDURES

This section applies to all development, or re-development of land, that results in land disturbance exceeding the applicability threshold of this Ordinance as discussed in Section 1 (b). Figure 1 that is provided at the end of this section is a flowchart summarizing the plan review/permit approval/project implementation process.

1. General Procedures

The project site owner shall submit an application for a Stormwater Management Permit to Decatur County. The application will include a completed application checklist, construction plan sheets, a stormwater drainage technical report, and any other necessary support information. Specific information to be included in the application can be found in Subsection (c) below. Two copies of each application must be submitted to Decatur County. Decatur County may, at its discretion, require one or more copies be submitted to other entities deemed appropriate by Decatur County. Additionally, a digital copy of the construction plans is required in a format accepted by Decatur County.

After Decatur County's receipt of the application, the applicant will be asked for additional information if the application is insufficient. If the application is complete, it will be reviewed in detail by Decatur County and/or its plan review consultant(s). Once all comments have been received and review completed, Decatur County will either approve the project, request modifications, or deny the project. If the applicant does not agree with or accept the review findings and wishes to seek an appeal, Decatur County will place the project on the agenda of the next regularly scheduled meeting of the Decatur County Area Plan Commission, provided the agenda for the meeting has not yet been advertised or published. If time for notification does not allow, the project shall be placed on the following regularly scheduled meeting of the Decatur County Area Plan Commission. If the project must go through a scheduled meeting, Decatur County will furnish the applicant a complete list of comments and objections to the plans and accompanying data prior to the scheduled meeting. After the scheduled meeting, Decatur County will either issue a permit, request modifications to the construction plans, or deny the project.

The project site owner must notify Decatur County 48 hours before beginning construction. Notification to Decatur County shall be in the form of an email. Once a permit has been issued and the pending

construction notifications submitted to Decatur County 48 hours before the beginning of construction, construction may commence. Once construction starts, the project owner shall monitor construction activities and inspect all aspects of the project in compliance with this Ordinance and the terms and conditions of the approved permit. Upon completion of construction activities, a Certification of Completion and Compliance and as-built plans must be submitted to Decatur County. Once the construction site has been stabilized and all temporary erosion and sediment control measures have been removed, a notification shall be sent to Decatur County, requesting an optional termination inspection by Decatur County or its designee. Decatur County, or its representative, may inspect the construction site to verify that the completed project meets the requirements of Decatur County's stormwater Ordinance and its technical standards and that the terms and conditions of the permit. Such an inspection will be in addition to termination inspection required by IDEM that will be conducted by IDEM or its designee.

(c) INFORMATION REQUIREMENTS

The items listed below must be submitted to Decatur County as part of the permit application. Specific projects or activities may be exempt from all or part of the informational requirements listed below. Exemptions are detailed in the "Applicability and Exemptions" subsections of Sections 3 and 5. If a project or activity is exempt from any or all requirements of this ordinance, an application should be filed listing the exemption criteria met, in lieu of the information requirements listed below.

The different elements of a permit submittal include an application checklist, construction plans, a stormwater drainage technical report, and any other necessary supporting information. All plans, reports, calculations, and narratives shall be signed and sealed by a professional engineer or a licensed surveyor, registered in the State of Indiana.

1. Application Checklist

As part of the Decatur County Stormwater Management Permit application package, the application checklist provided in the Decatur County Stormwater Technical Standards Manual must be completed by the applicant and provided along with other required supporting material.

2. Construction Plans

Construction plan sheets (larger than 11" by 17", but not to exceed 24" by 36" in size) and an accompanying narrative report shall describe and depict the existing and proposed conditions. Note that in order to gain an understanding of and to evaluate the relationship between the proposed improvements for a specific project section/phase and the proposed improvements for an overall multi-section (phased) project, the detailed information requested herein for the first section/phase being permitted must be accompanied by an overall project plan that includes the location, dimensions, and supporting analyses of all detention/retention facilities, primary conveyance facilities, and outlet conditions. Construction plans must include items listed in the application checklist provided in the Decatur County Stormwater Technical Standards Manual.

3. Stormwater Drainage Technical Report

A written stormwater drainage technical report must contain a discussion of the steps taken in the design of the stormwater drainage system. Note that in order to gain an understanding of and to evaluate the relationship between the proposed improvements for a specific project section/phase and the proposed improvements for an overall multi-section (phased) project, the detailed information requested herein for the first section/phase being permitted must be accompanied by an overall project plan that includes the location, dimensions, and supporting analyses of all detention/retention facilities, primary conveyance facilities, and outlet conditions. The technical report needs to include items listed in the application checklist provided in the Decatur County Stormwater Technical Standards Manual.

(d) CHANGES TO PLANS

Any changes or deviations in the detailed plans and specifications after approval of the applicable Stormwater Management Permit shall be filed with, and accepted by, Decatur County prior to the land development involving the change. Copies of the changes, if accepted, shall be attached to the original plans and specifications.

(e) FEE STRUCTURE

1. **FEE AMOUNT**

As a condition of the submittal and the review of development plans by Decatur County, the applicant shall agree to pay Decatur County the applicable fee, as set by Decatur County with respect to the review of all drainage submittals, preliminary plans, final plans, construction plans and accompanying information and data, as well as prepaid inspection fees.

2. TIME OF PAYMENT

After the meeting at which Decatur County is scheduled to consider acceptance of the applicant's final stormwater management plan, Decatur County will furnish a written statement to the applicant specifying the total amount due Decatur County in connection with the review of the applicant's submittals, plans and accompanying information and data, including the amount required to be paid by applicant for review and pre-paid inspection fees.

As a condition of acceptance of final drainage plans by Decatur County, applicant shall pay to Decatur County the sum set forth in said statement. Decatur County may issue such a billing statement before the project advances to the final acceptance stage, and such payment is due by applicant upon receipt of said billing statement regardless of whether the project is advanced to the final acceptance stage.

Decatur County shall have the right to not accept the drainage improvements or to not approve the advancement of any project for which the applicable fees have not been paid.

3. METHOD OF PAYMENT

Fees shall be paid by one of the following methods:

- Check
- Certified Check
- Cashier's Check
- Money Order

All checks shall be made payable to the:

Decatur County Area Plan Commission Decatur County Court House 150 Courthouse Square, Suite 117 Greensburg, IN 47240

4. REFUND OF PAYMENT

Fees are refundable **only** if Decatur County determines that compliance by the development or project to this Ordinance is not necessary.

5. FEE SCHEDULE

Stormwater Permit Application and Inspection Fees will be in accordance with the fee schedule set by Decatur County as a separate resolution.

(f) REQUIRED ASSURANCES

This section shall apply to all projects whether the stormwater management system or portions thereof will be dedicated to Decatur County or retained privately. As a condition of approval and issuance of the permit,

Decatur County shall require the applicant to provide assurance in form of an irrevocable letter of credit or a bond when the stormwater management plan has been accepted and before construction begins. Said assurance will guarantee a good faith execution of the stormwater drainage plan and any permit conditions. The assurance shall be for an amount equal to 125 percent of the total costs of all stormwater management measures for the entire project. The above-mentioned costs shall be based on an estimate as prepared by a registered engineer or land surveyor. Said costs shall be for the installation and ongoing monitoring and maintenance of the construction and ongoing monitoring and maintenance of storm drainage infrastructure, detention/retention facilities, and the post-construction channel protection measures, as regulated under this Ordinance, until the construction is completed, the site is stabilized, and as-built plans are accepted by Decatur County. Assurances shall be for a minimum of \$5,000. All other performance bonds, maintenance bonds or other assurances required by Decatur County in accordance with any and all other ordinances shall also apply and so be required. Local governmental jurisdictions may require additional performance and/or maintenance assurances. The intent of this assurance is not only to complete the installation of storm drain infrastructure for the project, but also to assure that adequate post-construction channel protection measures are properly installed and maintained. If adequate assurances are set aside by the project site owner for the overall project. proof of total assurance can be submitted in place of an individual stormwater assurance.

(g) TERMS AND CONDITIONS OF PERMITS

In granting a Stormwater Management Permit, Decatur County may impose such terms and conditions as are reasonably necessary to meet the purposes of this Ordinance. The project site owner shall ensure compliance with such terms and conditions. Non-compliance with the terms and conditions of permits will be subject to enforcement as described in Section 7.

The project site owner shall inform all general contractor, construction management firms, grading or excavating contractors, utility contractors, and the contractors that have primary oversight on individual building lots of the terms and conditions of the Stormwater Management Permit and the schedule for proposed implementation.

In the event that a project site is determined to impact or discharge to a Sensitive Area or is located in an Impact Drainage Area, Decatur County may require more stringent stormwater quantity and quality measures than detailed in this Ordinance or in the *Indiana Stormwater Quality Manual*.

1. Determination of Sensitive Areas

Sensitive Areas include highly erodible soils, wetlands, karst areas, threatened or endangered species habitat, outstanding waters, impaired waters, recreational waters, and surface drinking water sources. Any discharge from a stormwater practice that is a Class V injection well shall meet the Indiana groundwater quality standards and registered with US EPA as required by the IDEM. If wetlands are suspected on a site, a wetland delineation should be completed in accordance with the methodology established by the U.S. Army Corps of Engineers (COE). The need for the applicant to check for the presence of threatened or endangered species habitat will be determined on a case-by-case basis. Special terms and conditions for development determined to impact or discharge to any Sensitive Area shall be included in the Stormwater Management Permit.

2. Determination of Impact Drainage Areas

The following areas shall be designated as Impact Drainage Areas, unless good reason for not including them is presented to Decatur County.

- i. A floodway or floodplain as designated by the most updated FEMA Code dealing with floodplain regulation and/or by the Best Available Data through IDNR.
- ii. Land within 25 feet of each bank of any ditch within the Decatur County's system.
- iii. Land within 15 feet of the centerline of any stormwater infrastructure or enclosed conduit within the Decatur County's system.

- iv. Land within 50 feet of a natural drainageway.
- v. Land within the Fluvial Erosion Hazard (FEH) corridor.
- vi. Land within the expected breach inundation zone of an existing or proposed new dam, and areas protected from flooding by a dam or levee.

Decatur County is authorized, but is not required, to classify certain geographical areas as Impact Drainage Areas. In determining Impact Drainage Areas, Decatur County may consider such factors as topography, soil type, capacity of existing drains, and distance from adequate drainage facility.

Land that does not have an adequate outlet, taking into consideration the capacity and depth of the outlet, may be designated as an Impact Drainage Area by Decatur County. Special terms and conditions for development within any Impact Drainage Area shall be included in the Stormwater Management Permit.

3. Determination of Designated Drainage Areas Served by Regional Facilities

Decatur County is authorized, but is not required, to classify certain geographical areas as Designated Drainage Areas that are or will be served by regional facilities, such as a regional pond. In such cases, an Infrastructure Development Fee (IDF) rate may be established for the Designated Drainage Area. The basis for determining such a fee for a proposed development or re-development within a Designated Drainage Area will be as detailed in the Decatur County Stormwater Technical Standards Manual.

(h) CERTIFICATION OF AS-BUILT PLANS

This section shall apply to all projects whether the stormwater management system or portions thereof will be dedicated to Decatur County or retained privately. After completion of construction of the project and before the release of required performance assurances referenced in Section (f) above, a professionally prepared and certified 'as-built' set of plans (record drawings) shall be submitted to Decatur County for review. These as-built plans/record drawings must be prepared and certified by the Engineer of Record, i.e., the company/engineer who originally prepared the construction plans. Additionally, a digital copy of the 'as-built' plans (record drawings) as well as finalized digital versions of all analyses, models, manuals, and reports that are consistent with the as-built conditions is required in a format acceptable to Decatur County. These plans shall include all pertinent data relevant to the completed storm drainage system and stormwater management facilities, and shall include:

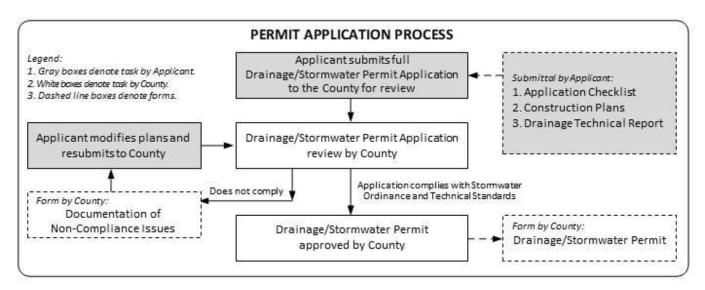
- 1. Pipe size and pipe material
- 2. Invert elevations
- 3. Top rim elevations
- 4. Elevation of the emergency overflow (spillway) for ponds
- 5. Grades along the emergency flood routing path(s)
- 6. Pipe structure lengths
- 7. BMP types, dimensions, and boundaries/easements, as applicable
- 8. "As-planted" plans for BMP's, as applicable
- 9. Data and calculations showing detention basin storage volume
- 10. Data and calculations showing channel protection volume (CPv) capacity
- 11. Certified statement on plans stating the completed storm drainage system and stormwater management facilities substantially comply with construction plans and the Stormwater Management Permit as approved by Decatur County. (See certificate in the Stormwater Technical Standards Manual.

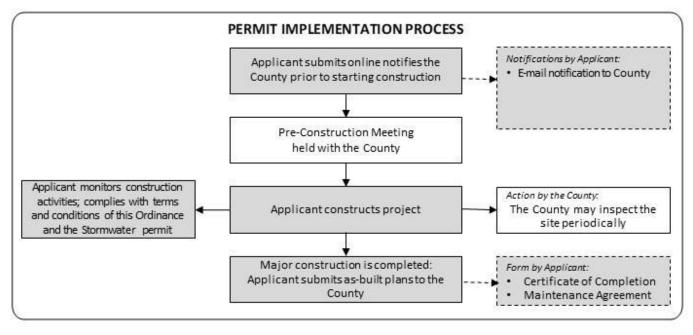
(i) POST-PROJECT MAINTENANCE BOND AND VERIFICATIONS

In addition to as-built plans and the certification of completion and compliance, following the release of performance assurances, the property owner, developer, or contractor shall be required to file a two-year

maintenance bond or other acceptable guarantee with Decatur County in an amount not to exceed twenty five percent (25%) of the cost of the stormwater management system located outside the public road rights-of-way, and in a form satisfactory to Decatur County in order to assure that such stormwater system installation was done according to standards of good workmanship, that the materials used in the construction and installation were of good quality and construction, and that such project was done in accordance with the accepted plans, and this Ordinance and that any off-site drainage problems that may arise, whether upstream or downstream of such project, will be corrected if such drainage problems are determined by Decatur County to have been caused by the development of such project. The bond or other acceptable guarantee shall be in effect for a period of two years after the date of the release of required performance assurances referenced in Section (f) above. The beneficiary of all maintenance bonds shall be the Decatur County Council.

Figure 1: Permit Approval and Project Implementation Process





Compliance and Enforcement

(a) COMPLIANCE WITH THIS ORDINANCE

To secure compliance with the requirements of this Ordinance, violations thereof shall be subject to the enforcement provisions set forth under (b) following. Additionally, compliance with all applicable ordinances of Decatur County as well as with applicable State of Indiana statues and regulations shall also be required. Unless otherwise stated, all other specifications referred to in this Ordinance shall be the most recent edition available.

1. Definitions

- i. Violation. Any action or inaction which violates the provisions of this Ordinance, the requirements of an approved stormwater management design plan or permit, and/or the requirements of a recorded stormwater maintenance agreement may be subject to the enforcement actions outlined in this Section. Any such action or inaction is deemed to be a public nuisance and may be abated by injunctive or other equitable relief, in addition to and separate from the imposition of any of the enforcement actions described below.
- ii. **Compliance**. The act of correcting a violation or violations within the time frame specified by Decatur County.
- iii. **Offence**. Both a violation and a failure of compliance on a particular project constitute an "offense." If there are multiple violations or multiple failures of compliance on the same project, each shall be considered a separate offense as further stated in section (b)(3).

2. Warning Notice

When Decatur County finds that any person has violated, or continues to violate, any provision of this ordinance, or any order issued hereunder, Decatur County may serve upon that person a written Warning Notice, specifying the particular violation believed to have occurred and requesting the discharger to immediately investigate the matter and to seek a resolution whereby any offending discharge will cease. Investigation and/or resolution of the matter in response to the Warning Notice in no way relieves the alleged violator of liability for any violations occurring before or after receipt of the Warning Notice. Nothing in this subsection shall limit the authority of Decatur County to take any action, including emergency action or any other enforcement action, without first issuing a Warning Notice.

(b) ENFORCEMENT OF THIS ORDINANCE

1. Notice of Violation/Citation

If Decatur County determines that an applicant or other responsible person has failed to comply with the terms and conditions of a permit, an approved stormwater management design plan, a recorded stormwater management maintenance agreement, or the provisions of this ordinance, it may issue a written Notice of Violation to such applicant or other responsible person and the owner of the property. Where a person is engaged in activity covered by this ordinance without having first secured a permit therefore, the notice of violation shall be served on the owner or the responsible person in charge of the activity being conducted on the site.

The notice of violation can be in the form of a citation ticket and/or a written letter that would contain detailed inspection findings, conclusions of law, disposition of warning or fines assessed, stipulated remedial actions as discussed with the responsible party representative, reasonable deadlines for those remedial actions, and the date of re-inspection.

2. Compensatory Action

In lieu of enforcement proceedings, penalties, and remedies authorized by this ordinance, Decatur County may impose upon a violator alternative compensatory actions such as storm drain stenciling, attendance at compliance workshops, creek cleanup, public education, etc.

3. Civil Penalties for Violations

Any person who commits an offense under this Ordinance commits a civil infraction subject to a fine not to exceed \$2,500 for each offense, plus costs, damages, and expenses. Each day such violation occurs or continues without a compliance action that is satisfactory to Decatur County may be deemed a separate offense and shall make the violator liable for the imposition of a fine for each day. The rights and remedies provided for in this section are cumulative and in addition to any other remedies provided by law. An admission or determination of responsibility shall not exempt the offender from compliance with the requirements of this Ordinance.

Any person who aids or abets a person in a violation of this Ordinance shall be subject to the penalties provided in this section.

Decatur County has established an Enforcement Response Schedule as noted in the table below that standardizes the approach that Decatur County may, in its discretion, employ in dealing with stormwater regulations offenses subject to this Ordinance and the associated Technical Standards document. When so employed, this Schedule shall apply separately to each offense in the following manner: The first offense is the underlying violation itself, while the subsequent offenses 2 thru 8 (as necessary) are failures of compliance.

Offence #	Type of Response Anticipated	
1 st offense	Verbal Telephone Notice, Letter of Violation or Written Warning and Administrative Penalty	
2 nd	Letter of Violation, Administrative Penalty and/or Site Visit	
offense		
3 rd offense	Letter of Violation, Administrative Penalty and/or Site Visit	
4 th offense	Letter of Violation, Administrative Penalty and/or Site Visit	
5 th offense	Agreed Order, Administrative Penalty and/or Site Visit	
6 th offense	Administrative Order, Administrative Penalty and/or Site Visit	
7 th offense	Compliance Schedule, Administrative Penalty and/or Site Visit	
8 th offense	Litigation and Administrative Penalty	

Likewise, in order to standardize the approach that Decatur County may, in its discretion, employ in the imposition of Administrative Penalties, Decatur County has established the following Schedule of Administrative Penalties. Again, the penalty for the 1st offense would apply to the violation itself, while the subsequent penalties 2 through 4 (as necessary) would apply to failures of compliance. In its discretion, Decatur County may impose penalties up to the amount specified in this Schedule.

Offence #	Penalty
1 st offense	\$250.00
2 nd offense	\$500.00
3 rd offense	\$1,000.00
4 th offense	\$2,500.00

4. Stop Work Order

In addition to the penalties listed above, if land disturbance activities are conducted contrary to the provisions of this Ordinance or accepted final stormwater management plans, Decatur County may order the work

stopped by notice in writing served on any person engaged in the doing or causing of such work to be done, and any such persons shall forthwith stop such work until authorized by Decatur County to proceed with the work. A Stop Work Order will be posted on the site by Decatur County and it is unlawful for any person to remove the notice or continue any work on the site without permission from Decatur County. Decatur County may also undertake or cause to be undertaken, any necessary or advisable protective measures to prevent violations of this Ordinance or to avoid or reduce the effects of noncompliance herewith. The cost of any such protective measures shall be the responsibility of the owner of the property upon which the work is being done and the responsibility of any person carrying out or participating in the work.

Decatur County may bring an action under IC 34-28-5-1 (b), to be read together with IC 34-6-2-86(1)(B) and 13-21-3-12(4), to enforce a stop work order against any person who neglects or fails to comply with a stop work order.

5. Withhold Certificate of Occupancy

Decatur County may refuse to issue a certificate of occupancy for the building or other improvements constructed or being constructed on the site until the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise satisfied the requirements of this ordinance as determined by Decatur County.

6. Suspension, Revocation, or Modification of Permits

Decatur County may suspend, revoke, or modify any existing permit that the violator may also have been previously granted. A suspended, revoked, or modified permit may be reinstated after the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violations described therein, provided such permit may be reinstated upon such conditions as Decatur County may deem necessary to enable the applicant or other responsible person to take the necessary remedial measures to cure such violations.

7. Suspension of Access to the Stormwater Drainage System

i. Emergency Cease and Desist Orders

When Decatur County finds that any person has violated, or continues to violate, any provision of this ordinance, or any order issued hereunder, or that the person's past violations are likely to recur, and that the person's violation(s) has (have) caused or contributed to an actual or threatened discharge to the County's systems or waters of the United States which reasonably appears to present an imminent or substantial endangerment to the health or welfare of persons or to the environment, Decatur County may inform the County's Health Department and/or IDEM and issue an order to the violator directing it immediately to cease and desist all such violations and directing the violator to immediately comply with all ordinance requirements and take such appropriate preventive action as may be needed to properly address a continuing or threatened violation, including immediately halting operations and/or terminating the discharge.

Any person notified of an emergency order directed to it under this Subsection shall immediately comply and stop or eliminate its endangering discharge. In the event of a discharger's failure to immediately comply voluntarily with the emergency order, Decatur County may commence court action against such person under IC 34-28-5-1 (b), to be read together with IC 34-6-2-86(1)(B) and 13-21-3-12(4), to enforce a stop work order.

IDEM and Decatur County may allow the person to recommence its discharge when it has demonstrated to the satisfaction of IDEM and Decatur County that the period of endangerment has passed, unless further termination proceedings are initiated against the discharger under this ordinance. A person that is responsible, in whole or in part, for any discharge presenting imminent endangerment shall submit a detailed written statement, describing the causes of the harmful discharge and the measures taken to prevent any future occurrence, to Decatur County within 5 days of receipt of the emergency order. Issuance of an emergency cease and desist order shall not be a bar against, or a prerequisite for, taking any other action against the violator.

ii. Suspension Due to Illicit Discharges in Emergency Situations

Decatur County may, without prior notice, notify the County Health Department and IDEM, and may also suspend stormwater drainage system discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, or to the health or welfare of persons, or to the stormwater drainage system or waters of the state if the violator fails to comply with a suspension order issued in an emergency, Decatur County may take such steps as deemed necessary to prevent or minimize damage to the stormwater drainage system or waters of the state, or to minimize danger to persons.

(c) COST OF ABATEMENT OF THE VIOLATION

In addition to any other remedies, should any owner fail to comply with the provisions of this ordinance, Decatur County may, after giving notice and opportunity for compliance, have the necessary work done, and the owner shall be required to promptly reimburse Decatur County for all costs of such work.

Nothing herein contained shall prevent Decatur County from taking such other lawful action as may be necessary to prevent or remedy any violation. All costs connected therewith shall accrue to the person or persons responsible. Costs include, but are not limited to, repairs to the stormwater drainage system made necessary by the violation, as well as those penalties levied by the EPA or IDEM for violation of Decatur County's NPDES permit (if applicable), administrative costs, attorney fees, court costs, and other costs and expenses associated with the enforcement of this Ordinance, including sampling and monitoring expenses.

If the amount due for abatement of the violation is not paid within a timely manner as determined by the decision of Decatur County or by the expiration of the time in which to file an appeal, Decatur County may commence a court action to recover the costs assessed under IC 34-28-5-1 (b), to be read together with IC 34-6-2-86(1)(B) and 13-21-3-12(4).

(d) APPEALS

1. Appeal of Notice of Violation

Any person to whom any provision of this Ordinance has been applied may appeal in writing, not later than 30 days after the action or decision being appealed from, to the Area Plan Commission of Decatur County the action or decision whereby any such provision was so applied. Such appeal shall identify the matter being appealed, and the basis for the appeal. The Area Plan Commission of Decatur County shall consider the appeal and make a decision whereby it affirms, rejects or modifies the action being appealed. In considering any such appeal, the Area Plan Commission of Decatur County may consider the recommendations of Decatur County Staff and the comments of other persons having knowledge of the matter. In considering any such appeal, the Area Plan Commission may grant a variance from the terms of this Ordinance to provide relief, in whole or in part, from the action being appealed, but only upon finding that the following requirements are satisfied:

- i. The application of the Ordinance provisions being appealed will present or cause practical difficulties for a development or development site; provided, however, that practical difficulties shall not include the need for the developer to incur additional reasonable expenses in order to comply with the Ordinance; and
- ii. The granting of the relief requested will not substantially prevent the goals and purposes of this Ordinance, nor result in less effective management of stormwater runoff.
- iii. Any person who has appealed a violation to the Area Plan Commission of Decatur County may appeal an adverse decision of the Board to the Decatur County court within 60 days of the Boards order, all pursuant to IC 36-1-6-9 (e) & (f).

2. Enforcement Measures After Appeal

If the violation has not been corrected pursuant to the requirements set forth in the Notice of Violation, or, in the event of an appeal, within 5 days of the decision of the Decatur County Area Plan Commission upholding the decision of Decatur County, then representatives of Decatur County shall enter upon the subject private property and are authorized to take any and all measures necessary to abate the violation and/or restore the property, including the commencing of a court action under IC 34-28-5-1 (b),to be read together with IC 34-6-2-86(1)(B) and 13-21-3-12(4), to enforce the order of the Decatur County Area Plan Commission.



Abbreviations and Definitions

(a) ABBREVIATIONS

BMP Best Management Practice

COE United States Army Corps of Engineers

CWA Clean Water Act

EPA Environmental Protection Agency

GIS Geographical Information System

IDEM Indiana Department of Environmental Management

MS4 Municipal Separate Storm Sewer System

NRCS USDA-Natural Resources Conservation Service

NPDES National Pollutant Discharge Elimination System

POTW Publicly Owned Treatment Works

SWCD Soil and Water Conservation District

SWPPP Stormwater Pollution Prevention Plan

USDA United States Department of Agriculture

USFWS United States Fish and Wildlife Service

(b) **DEFINITIONS**

Agricultural land disturbing activity. Tillage, planting, cultivation, or harvesting operations for the production of agricultural or nursery vegetative crops. The term also includes pasture renovation and establishment, the construction of agricultural conservation practices, and the installation and maintenance of agricultural drainage tile.

Base Flow. Stream discharge derived from groundwater sources as differentiated from surface runoff. Sometimes considered to include flows from regulated lakes or reservoirs.

Best Management Practices. Design, construction, and maintenance practices and criteria for stormwater facilities that minimize the impact of stormwater runoff rates and volumes, prevent erosion, and capture pollutants.

Buffer Strip. An existing, variable width strip of vegetated land intended to protect water quality and habitat.

Capacity (of a Storm Drainage Facility). The maximum flow that can be conveyed or stored by a storm drainage facility without causing damage to public or private property.

Catch Basin. A chamber usually built at the curb line of a street for the admission of surface water to a storm drain or subdrain, having at its base a sediment sump designed to retain grit and detritus below the point of overflow.

Channel. A portion of a natural or artificial watercourse which periodically or continuously contains moving water, or which forms a connecting link between two bodies of water. It has a defined bed and banks which serve to confine the water.

Compliance. The act of correcting a violation or violations within the time frame specified by Decatur County.

Comprehensive Stormwater Management. A comprehensive stormwater program for effective management of stormwater quantity and quality throughout the community.

Constructed Wetland. A manmade shallow pool that creates growing conditions suitable for wetland vegetation and is designed to maximize pollutant removal.

Construction activity. Land disturbing activities, and land disturbing activities associated with the construction of infrastructure and structures. This term does not include routine ditch or road maintenance or minor landscaping projects.

Construction site access. A stabilized stone surface at all points of ingress or egress to a project site, for the purpose of capturing and detaining sediment carried by tires of vehicles or other equipment entering or exiting the project site.

Construction Support Activities. Include but are not limited to the following: concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas. Such activities must not support multiple, unrelated projects, be a commercial/industrial operation, or continue to operate beyond the completion of the construction activity for the project it supports.

Contiguous. Adjoining or in actual contact with.

Contour. An imaginary line on the surface of the earth connecting points of the same elevation.

Contour Line. Line on a map which represents a contour or points of equal elevation.

Contractor or subcontractor. An individual or company hired by the project site or individual lot owner, their agent, or the individual lot operator to perform services on the project site.

Conveyance. Any structural method for transferring stormwater between at least two points. The term includes piping, ditches, swales, curbs, gutters, catch basins, channels, storm drains, and roadways.

Cross Section. A graph or plot of ground elevation across a stream valley or a portion of it, usually along a line perpendicular to the stream or direction of flow.

Culvert. A closed conduit used for the conveyance of surface drainage water under a roadway, railroad, canal or other impediment.

Dechlorinated swimming pool discharge. Chlorinated water that has either sat idle for seven (7) days following chlorination prior to discharge to the MS4 conveyance, or, by analysis, does not contain detectable concentrations (less than five-hundredths (0.05) milligram per liter) of chlorinated residual.

Design Storm. A selected storm event, described in terms of the probability of occurring once within a given number of years, for which drainage or flood control improvements are designed and built.

Detention. Managing stormwater runoff by temporary holding and controlled release.

Detention Basin. A facility constructed or modified to restrict the flow of stormwater to a prescribed maximum rate, and to detain concurrently the excess waters that accumulate behind the outlet.

Detention Storage. The temporary detaining of storage of stormwater in storage facilities, on rooftops, in streets, parking lots, school yards, parks, open spaces or other areas under predetermined and controlled conditions, with the rate of release regulated by appropriately installed devices.

Detention Time. The theoretical time required to displace the contents of a tank or unit at a given rate of discharge (volume divided by rate of discharge).

Detritus. Dead or decaying organic matter; generally contributed to stormwater as fallen leaves and sticks or as dead aquatic organisms.

Developer. Any person financially responsible for construction activity, or an owner of property who sells or leases, or offers for sale or lease, any lots in a subdivision.

Development. Any man-made change to improved or unimproved real estate including but not limited to:

- i. Construction, reconstruction, or placement of a building or any addition to a building;
- ii. Construction of flood control structures such as levees, dikes, dams or channel improvements;
- iii. Construction or reconstruction of bridges or culverts;
- iv. Installing a manufactured home on a site, preparing a site for a manufactured home, or installing a recreational vehicle on a site for more than hundred eight (180) days;
- v. Installing utilities, erection of walls, construction of roads, or similar projects;
- vi. Mining, dredging, filling, grading, excavation, or drilling operations;
- vii. Storage of materials; or
- viii. Any other activity that might change the direction, height, or velocity of flood or surface waters.

"Development" does not include activities such as the maintenance of existing buildings and facilities such as painting, re-roofing, resurfacing roads, or gardening, plowing and similar agricultural practices that do not involve filling, grading, excavation, or the construction of permanent buildings.

Discharge. In the context of water quantity provisions, usually the rate of water flow, i.e., a volume of fluid passing a point per unit time commonly expressed as cubic feet per second, cubic meters per second, gallons per minute, or millions of gallons per day. In the context of water quality provisions, the discharge means any addition of liquids or solids to a water body or a flow conveyance facility.

Disposal. The discharge, deposit, injection, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that the solid waste or hazardous waste, or any constituent of the waste, may enter the environment, be emitted into the air, or be discharged into any waters, including ground waters.

Ditch. A man-made, open watercourse in or into which excess surface water or groundwater drained from land, stormwater runoff, or floodwaters flow either continuously or intermittently.

Drain. A buried slotted or perforated pipe or other conduit (subsurface drain) or a ditch (open drain) for carrying off surplus groundwater or surface water.

Drainage. The removal of excess surface water or groundwater from land by means of ditches or subsurface drains. Also see Natural drainage.

Drainage Area. The area draining into a stream at a given point. It may be of different sizes for surface runoff, subsurface flow and base flow, but generally the surface runoff area is considered as the drainage area.

Dry Well. A type of infiltration practice that allows stormwater runoff to flow directly into the ground via a bored or otherwise excavated opening in the ground surface.

Duration. The time period of a rainfall event.

Environment. The sum total of all the external conditions that may act upon a living organism or community to influence its development or existence.

Erodibility Index (EI). The soil erodibility index (EI) provides a numerical expression of the potential for a soil to erode considering the physical and chemical properties of the soil and the climatic conditions where it is located. The higher the index, the greater the investment needed to maintain the sustainability of the soil resource base if intensively cropped. It is defined to be the maximum of (RxKxLS)/T (from the Universal Soil Loss Equation) and (CxI)/T (from the Wind Erosion Equation), where R is a measure of rainfall and runoff, K is a factor of the susceptibility of the soil to water erosion, LS is a measure of the combined effects of slope length and steepness, C is a climatic characterization of windspeed and surface soil moisture and I is a measure of the susceptibility of the soil to wind erosion. Erodibility Index scores equal to or greater than 8 are considered highly erodible land.

Erosion. The wearing away of the land surface by water, wind, ice, gravity, or other geological agents. The following terms are used to describe different types of water erosion:

- Accelerated erosion--Erosion much more rapid than normal or geologic erosion, primarily as a result of the activities of man.
- Channel erosion --An erosion process whereby the volume and velocity of flow wears away the bed and/or banks of a well-defined channel.
- *Gully erosion* --An erosion process whereby runoff water accumulates in narrow channels and, over relatively short periods, removes the soil to considerable depths, ranging from 1-2 ft. to as much as 75-100 ft.
- *Rill erosion*--An erosion process in which numerous small channels only several inches deep are formed; occurs mainly on recently disturbed and exposed soils (see Rill).
- Splash erosion--The spattering of small soil particles caused by the impact of raindrops on wet soils; the loosened and spattered particles may or may not be subsequently removed by surface runoff.
- Sheet erosion--The gradual removal of a fairly uniform layer of soil from the land surface by runoff water.

Erosion and sediment control. A practice, or a combination of practices, to minimize sedimentation by first reducing or eliminating erosion at the source and then as necessary, trapping sediment to prevent it from being discharged from or within a project site.

Filter Strip. Usually a long, relatively narrow area (usually, 20-75 feet wide) of undisturbed or planted vegetation used near disturbed or impervious surfaces to filter stormwater pollutants for the protection of watercourses, reservoirs, or adjacent properties.

Floatable. Any solid waste that will float on the surface of the water.

Flood (or Flood Waters). A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow, the unusual and rapid accumulation, or the runoff of surface waters from any source.

Floodplain. The channel proper and the areas adjoining the channel which have been or hereafter may be covered by the regulatory or 100-year flood. Any normally dry land area that is susceptible to being inundated by water from any natural source. The floodplain includes both the floodway and the floodway fringe districts.

Floodway. The channel of a river or stream and those portions of the floodplains adjoining the channel which are reasonably required to efficiently carry and discharge the peak flow of the regulatory flood of any river or stream.

Floodway Fringe. That portion of the flood plain lying outside the floodway, which is inundated by the regulatory flood.

Fluvial Erosion Hazard (FEH) Corridor. Fluvial Erosion Hazard corridors represent the areas along the streams (including the channel and immediate overbanks areas) that are believed to be subject to stream movement or streambank erosion. These corridors have been delineated for most actively migrating and relatively stationary streams in Indiana through an Indiana Silver Jackets initiative.

Footing Drain. A drain pipe installed around the exterior of a basement wall foundation to relieve water pressure caused by high groundwater elevation.

Garbage. All putrescible animal solid, vegetable solid, and semisolid wastes resulting from the processing, handling, preparation, cooking, serving, or consumption of food or food materials.

Gasoline outlet. An operating gasoline or diesel fueling facility whose primary function is the resale of fuels. The term applies to facilities that create five thousand (5,000) or more square feet of impervious surface, or generate an average daily traffic count of one hundred (100) vehicles per one thousand (1,000) square feet of land area.

Geographical Information System. A computer system capable of assembling, storing, manipulation, and displaying geographically referenced information. This technology can be used for resource management and development planning.

Grade. (1) The inclination or slope of a channel, canal, conduit, etc., or natural ground surface usually expressed in terms of the percentage the vertical rise (or fall) bears to the corresponding horizontal distance. (2) The finished surface of a canal bed, roadbed, top of embankment, or bottom of excavation; any surface prepared to a design elevation for the support of construction, such as paving or the laying of a conduit. (3) To finish the surface of a canal bed, roadbed, top of embankment, or bottom of excavation, or other land area to a smooth, even condition.

Grading. The cutting and filling of the land surface to a desired slope or elevation.

Grass. A member of the botanical family Graminae, characterized by blade-like leaves that originate as a sheath wrapped around the stem.

Groundwater. Accumulation of underground water, natural or artificial. The term does not include manmade underground storage or conveyance structures.

Habitat. The environment in which the life needs of a plant or animal are supplied.

Highly Erodible Land (HEL). Land that has an erodibility index of eight or more.

Hot Spot Development. Projects involving land uses considered to be high pollutant producers such as vehicle service and maintenance facilities, vehicle salvage yards and recycling facilities, vehicle and equipment cleaning facilities, fleet storage areas for buses, trucks, etc., industrial/commercial or any hazardous waste storage areas or areas that generate such wastes, industrial sites, restaurants and convenience stores, any activity involving chemical mixing or loading/unloading, outdoor liquid container storage, public works storage areas, commercial container nurseries, and some high traffic retail uses characterized by frequent vehicle turnover.

Hydrologic Unit Code. A numeric United States Geologic Survey code that corresponds to a watershed area. Each area also has a text description associated with the numeric code.

Hydrology. The science of the behavior of water in the atmosphere, on the surface of the earth, and underground. A typical hydrologic study is undertaken to compute flow rates associated with specified flood events.

Illicit Discharge. Any discharge to a conveyance that is not composed entirely of stormwater except naturally occurring floatables, such as leaves or tree limbs. Illicit discharges include polluted flows from direct and indirect connections to the MS4 conveyance, illegal dumping, and contaminated runoff.

Impaired Waters. Waters that do not or are not expected to meet applicable water quality standards, as included on IDEM's CWA Section 303(d) List of Impaired Waters.

Impervious surface. Surfaces, such as pavement and rooftops, which prevent the infiltration of stormwater into the soil.

Individual building lot. A single parcel of land within a multi-parcel development.

Individual lot operator. A contractor or subcontractor working on an individual lot.

Individual lot owner. A person who has financial control of construction activities for an individual lot.

Infiltration. Passage or movement of water into the soil. Infiltration practices include any structural BMP designed to facilitate the percolation of runoff through the soil to groundwater. Examples include infiltration basins or trenches, dry wells, and porous pavement.

Inlet. An opening into a storm drain system for the entrance of surface stormwater runoff, more completely described as a storm drain inlet.

Land-disturbing Activity. Any man-made change of the land surface, including removing vegetative cover that exposes the underlying soil, excavating, filling, transporting and grading.

Land Surveyor. A person licensed under the laws of the State of Indiana to practice land surveying.

Larger common plan of development or sale. A plan, undertaken by a single project site owner or a group of project site owners acting in concert, to offer lots for sale or lease; where such land is contiguous, or is known, designated, purchased or advertised as a common unit or by a common name, such land shall be presumed as being offered for sale or lease as part of a larger common plan. The term also includes phased or other construction activity by a single entity for its own use.

Lowest Adjacent Grade. The elevation of the lowest grade adjacent to a structure, where the soil meets the foundation around the outside of the structure (including structural members such as basement walkout, patios, decks, porches, support posts or piers, and rim of the window well.

Lowest Floor. Refers to the lowest of the following:

- i. The top of the basement floor:
- ii. The top of the garage floor, if the garage is the lowest level of the building:
- iii. The top of the first floor of buildings constructed on a slab or of buildings elevated on pilings or constructed on a crawl space with permanent openings; or
- iv. The top of the floor level of any enclosure below an elevated building where the walls of the enclosure provide any resistance to the flow of flood waters unless:
 - The walls are designed to automatically equalize the hydrostatic flood forces on the walls by allowing for the entry and exit of flood waters, by providing a minimum of two opening (in addition to doorways and windows) having a total area of one (1) square foot for Stormwater Management Ordinance - Appendix A: Abbreviations and Definitions • Page A6

- every two (2) square feet of enclosed area subject to flooding. The bottom of all such openings shall be no higher than one (1) foot above grade.
- 2. Such enclosed space shall be usable only for the parking of vehicles or building access.

Manhole. Storm drain structure through which a person may enter to gain access to an underground storm drain or enclosed structure.

Measurable storm event. A precipitation event that results in a total measured precipitation accumulation equal to, or greater than, one-half (0.5) inch of rainfall.

Mulch. A natural or artificial layer of plant residue or other materials covering the land surface which conserves moisture, holds soil in place, aids in establishing plant cover, and minimizes temperature fluctuations.

Municipal Separate Storm Sewers. An MS4 meets all the following criteria: (1) is a conveyance or system of conveyances owned by the state, county, city, town, or other public entity; (2) discharges to waters of the U.S.; (3) is designed or used for collecting or conveying stormwater; (4) is not a combined sewer; and, (5) is not part of a Publicly Owned Treatment Works (POTW).

National Pollutant Discharge Elimination System. A permit developed by the U.S. EPA through the Clean Water Act. In Indiana, the permitting process has been delegated to IDEM. This permit covers aspects of municipal stormwater quality.

Natural Drainage. The flow patterns of stormwater runoff over the land in its pre-development state.

Nutrient(s). (1) A substance necessary for the growth and reproduction of organisms. (2) In water, those substances (chiefly nitrates and phosphates) that promote growth of algae and bacteria.

Offense. Both a violation and a failure of compliance on a particular project. If there are multiple violations or multiple failures of compliance on the same project, each shall be considered a separate Offense.

Open Drain. A natural watercourse or constructed open channel that conveys drainage water.

Open Space. Any land area devoid of any disturbed or impervious surfaces created by industrial, commercial, residential, agricultural, or other manmade activities.

Outfall. The point, location, or structure where a pipe or open drain discharges to a receiving body of water.

Outlet. The point of water disposal from a stream, river, lake, tidewater, or artificial drain.

Peak Discharge (or Peak Flow). The maximum instantaneous flow from a given storm condition at a specific location.

Percolation. The movement of water through soil.

Permanent stabilization. The establishment, at a uniform density of seventy percent (70%) across the disturbed area, of vegetative cover or permanent non-erosive material that will ensure the resistance of the soil to erosion, sliding, or other movement.

Pervious. Allowing movement of water.

Point Source. Any discernible, confined, and discrete conveyance including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, or container from which pollutants are or maybe discharged (P.L. 92-500, Section 502[14]).

Porous pavement. A type of infiltration practice to improve the quality and reduce the quantity of stormwater runoff via the use of manmade, pervious pavement which allows runoff to percolate through the pavement and into underlying soils

Professional Engineer. A person licensed under the laws of the State of Indiana to practice professional engineering.

Project site. The entire area on which construction activity is to be performed.

Project site owner. The person required to submit a stormwater permit application and required to comply with the terms of this ordinance, including a developer or a person who has financial and operational control of construction activities, and project plans and specifications, including the ability to make modifications to those plans and specifications.

Rain garden. A vegetative practice used to alter impervious surfaces, such as roofs, into pervious surfaces for absorption and treatment of rainfall.

Receiving Stream, Receiving Channel, or Receiving Water. The body of water into which runoff or effluent is discharged. The term does not include private drains, unnamed conveyances, retention and detention basins, or constructed wetlands used as treatment.

Recharge. Replenishment of groundwater reservoirs by infiltration and transmission from the outcrop of an aquifer or from permeable soils.

Redevelopment. Development occurring on a previously developed site.

Refueling area. An operating gasoline or diesel fueling area whose primary function is to provide fuel to equipment or vehicles.

Regional Pond. A detention/retention basin sized to detain/retain the runoff from the entire watershed, on-site and off-site, tributary to the pond's outlet.

Regulatory Flood. The discharge or elevation associated with the 100-year flood as calculated by a method and procedure which is acceptable to and approved by the Indiana Department of Natural Resources and the Federal Emergency Management Agency. The "regulatory flood" is also known as the "base flood".

Regulatory Floodway. See Floodway.

Release Rate. The amount of stormwater release from a stormwater control facility per unit of time.

Reservoir. A natural or artificially created pond, lake or other space used for storage, regulation or control of water. May be either permanent or temporary. The term is also used in the hydrologic modeling of storage facilities.

Retention. The storage of stormwater to prevent it from leaving the development site. May be temporary or permanent.

Retention basin. A type of storage practice, that has no positive outlet, used to retain stormwater runoff for an indefinite amount of time. Runoff from this type of basin is removed only by infiltration through a porous bottom or by evaporation.

Return Period. The average interval of time within which a given rainfall event will be equaled or exceeded once. A flood having a return period of 100 years has a one percent probability of being equaled or exceeded in any one year.

Riparian zone. Of, on, or pertaining to the banks of a stream, river, or pond.

Riparian habitat. A land area adjacent to a waterbody that supports animal and plant life associated with that waterbody.

Runoff. That portion of precipitation that flows from a drainage area on the land surface, in open channels, or in stormwater conveyance systems.

Runoff Coefficient. A decimal fraction relating the amount of rain which appears as runoff and reaches the storm drain system to the total amount of rain falling. A coefficient of 0.5 implies that 50 percent of the rain falling on a given surface appears as stormwater runoff.

Sediment. Solid material (both mineral and organic) that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity, or ice and has come to rest on the earth's surface.

Sedimentation. The process that deposits soils, debris and other unconsolidated materials either on the ground surfaces or in bodies of water or watercourses.

Sensitive Water. A waterbody is in need of priority protection or remediation based on its:

- i. Providing habitat for threatened or endangered species,
- ii. Usage as a public water supply intake,
- iii. Relevant community value,
- iv. Usage for full body contact recreation,
- v. exceptional use classification as found in 327 IAC 2-1-11(b),
- vi. Outstanding state resource water classification as found in 327 IAC 2-1-2(3) and 327 IAC 2-1.5-19(b).

Silvicultural. the practice of controlling the establishment, growth, composition, health, and quality of forests to meet diverse needs and values.

- i. Nonpoint activities include source silvicultural activities—such as nursery operations, site preparation, reforestation and subsequent cultural treatment, thinning, prescribed burning, pest and fire control, harvesting operations, surface drainage, or road construction and maintenance from which there is natural runoff. Some of these activities (such as stream crossing for roads) may involve the placement of dredged or fill material which may require a CWA section 404 permit and a 401 Water Quality Certification.
- ii. Point source activities include any discernible, confined and discrete conveyance related to rock crushing, gravel washing, log sorting, or log storage facilities which are operated in connection with silvicultural activities and from which pollutants are discharged into waters of the United States or the State.

Site. The entire area included in the legal description of the land on which land disturbing activity is to be performed.

Slope. Degree of deviation of a surface from the horizontal, measured as a numerical ratio or percent. Expressed as a ratio, the first number is commonly the horizontal distance (run) and the second is the vertical distance (rise)--e.g., 2:1. However, the preferred method for designation of slopes is to clearly identify the horizontal (H) and vertical (V) components (length (L) and Width (W) components for horizontal angles). Also note that according to international standards (Metric), the slopes are presented as the vertical or width component shown on the numerator--e.g., 1V:2H. Slope expressions in this Ordinance follow the common presentation of slopes--e.g., 2:1 with the metric presentation shown in parentheses--e.g., (1V:2H). Slopes can also be expressed in "percent". Slopes given in percent are always expressed as (100*V/H) --e.g., a 2:1 (1V:2H) slope is a 50% slope.

Soil. The unconsolidated mineral and organic material on the immediate surface of the earth that serves as a natural medium for the growth of land plants.

Soil and Water Conservation District. A public organization created under state law as a special-purpose district to develop and carry out a program of soil, water, and related resource conservation, use, and development within its boundaries. A subdivision of state government with a local governing body, established under IC 14-32.

Solid Waste. Any garbage, refuse, debris, or other discarded material.

Spill. The unexpected, unintended, abnormal, or unapproved dumping, leakage, drainage, seepage, discharge, or other loss of petroleum, hazardous substances, extremely hazardous substances, or objectionable substances. The term does not include releases to impervious surfaces when the substance does not migrate off the surface or penetrate the surface and enter the soil.

Storm Duration. The length of time that water may be stored in any stormwater control facility, computed from the time water first begins to be stored.

Storm Event. An estimate of the expected amount of precipitation within a given period of time. For example, a 10-yr. frequency, 24-hr. duration storm event is a storm that has a 10% probability of occurring in any one year. Precipitation is measured over a 24-hr. period.

Storm Sewer. A closed conduit for conveying collected stormwater, while excluding sewage and industrial wastes. Also called a storm drain.

Stormwater. Water resulting from rain, melting or melted snow, hail, or sleet.

Stormwater Management System. A collection of structural and non-structural practices and infrastructure designed to manage stormwater on a site. This system may include but is not limited to erosion control measures, storm drainage infrastructure, detention/retention facilities, and stormwater quality BMP's.

Stormwater Pollution Prevention Plan. A plan developed to minimize the impact of stormwater pollutants resulting from construction activities.

Stormwater Runoff. The water derived from rains falling within a tributary basin, flowing over the surface of the ground or collected in channels or conduits.

Stormwater Quality Management Plan. A comprehensive written document that addresses stormwater runoff quality.

Stormwater Quality Measure. A practice, or a combination of practices, to control or minimize pollutants associated with stormwater runoff.

Stormwater Drainage System. All means, natural or man-made, used for conducting stormwater to, through or from a drainage area to any of the following: conduits and appurtenant features, canals, channels, ditches, storage facilities, swales, streams, culverts, streets and pumping stations.

Strip Development. A multi-lot project where building lots front on an existing road.

Subdivision, Major. Any land that is divided or proposed to be divided into four (4) or more lots, whether contiguous or subject to zoning requirements, for the purpose of sale or lease as part of a larger common plan of development or sale.

Subdivision, Minor. Any land that is divided or proposed to be divided into less than four (4) lots, whether contiguous or subject to zoning requirements, for the purpose of sale or lease as part of a larger common plan of development or sale.

Subsurface Drain. A pervious backfield trench, usually containing stone and perforated pipe, for intercepting groundwater or seepage.

Surface Runoff. Precipitation that flows onto the surfaces of roofs, streets, the ground, etc., and is not absorbed or retained by that surface but collects and runs off.

Swale. An elongated depression in the land surface that is at least seasonally wet, is usually heavily vegetated, and is normally without flowing water. Swales conduct stormwater into primary drainage channels and may provide some groundwater recharge.

Temporary Stabilization. The covering of soil to ensure its resistance to erosion, sliding, or other movement. The term includes vegetative cover, anchored mulch, or other non-erosive material applied at a uniform density of seventy percent (70%) across the disturbed area.

Tile Drain. Pipe made of perforated plastic, burned clay, concrete, or similar material, laid to a designed grade and depth, to collect and carry excess water from the soil.

Topographic Map. Graphical portrayal of the topographic features of a land area, showing both the horizontal distances between the features and their elevations above a given datum.

Topography. The representation of a portion of the earth's surface showing natural and man-made features of a give locality such as rivers, streams, ditches, lakes, roads, buildings and most importantly, variations in ground elevations for the terrain of the area.

Trained individual. An individual who is trained and experienced in the principles of stormwater quality, including erosion and sediment control as may be demonstrated by state registration, professional certification (such as CESSWI and/or CPESC certification), or other documented and applicable experience or coursework as deemed sufficient by Decatur County that enable the individual to make judgments regarding stormwater control or treatment and monitoring.

Urban Drain. A drain defined as "Urban Drain" in Indiana Drainage Code.

Urbanization. The development, change or improvement of any parcel of land consisting of one or more lots for residential, commercial, industrial, institutional, recreational or public utility purposes.

Vegetated swale. A type of vegetative practice used to filter stormwater runoff via a vegetated, shallow-channel conveyance.

Violation. Any action or inaction which violates the provisions of this Ordinance or the Technical Standards, the requirements of an approved stormwater management design plan or permit, and/or the requirements of a recorded stormwater maintenance agreement may be subject to the enforcement actions outlined in Section 7 of this Ordinance. Any such action or inaction is deemed to be a public nuisance and may be abated by injunctive or other equitable relief in addition to, and separate from, the imposition of any of the enforcement actions described in Section 7 of this Ordinance.

Water Quality. A term used to describe the chemical, physical, and biological characteristics of water, usually in respect to its suitability for a particular purpose.

Water Resources. The supply of groundwater and surface water in a given area.

Waterbody. Any accumulation of water, surface, or underground, natural or artificial, excluding water features designed and designated as water pollution control facilities.

Watercourse. Any river, stream, creek, brook, branch, natural or man-made drainageway in or into which stormwater runoff or floodwaters flow either continuously or intermittently.

Watershed. The region drained by or contributing water to a specific point that could be along a stream, lake or other stormwater facility. Watersheds are often broken down into subareas for the purpose of hydrologic modeling.

Watershed Area. All land and water within the confines of a drainage divide. See also Watershed.

Wetlands. Areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.